



# Black Tern

*Chidonias niger*



Kevin T. Karlson Photo

**CURRENT STATUS:** In Pennsylvania, the black tern is endangered and protected under the Game and Wildlife Code. Although not listed as endangered or threatened at the federal level, the black tern is a species of high concern in the Upper Mississippi Valley/Great Lakes Region of the North American Water-bird Conservation Plan and is a U. S. Fish and Wildlife Service migratory bird of conservation concern in the Northeast. All migratory birds are protected under the federal Migratory Bird Treaty Act of 1918.

**POPULATION TREND:** Black terns (*Chidonias niger*) have declined in numbers both during migration and at the few nesting sites known in Pennsylvania. They once bred annually in Crawford County and have nested in recent years at Presque Isle State Park in Erie County. However, only one black tern nest was found in Erie County during the 2nd Pennsylvania Breeding Bird Atlas (2004-2008). During the 1st Pennsylvania Breeding Bird Atlas, 11 records were reported, with 4 confirmed nesting areas. These were restricted to Erie and Crawford counties.

Black terns have been a species of concern in North America because of continent-wide population declines, particularly since the 1960s. Currently, the species is listed as threatened or endangered in six states and is considered of conservation concern in 18 other states and provinces. Breeding bird surveys show black terns declined significantly in North America at an average rate of about three percent annually (61 percent overall) from 1966 to 1996.



Missouri Dept. of Conservation

These declines largely reflect trends prior to 1980, and trends in the Prairie Potholes were reversed in the 1990s. The North American population has leveled off or increased slightly, primarily in Canada. The species still occupies most of its former range, and the continent-wide breeding population probably still numbers in the low to mid hundreds of thousands. The black tern was listed as a threatened species since 1985; it was designated an endangered species in 1990.

**IDENTIFYING CHARACTERISTICS:** Terns are slender, graceful fliers with long pointed wings. They are often associated with coastal environments, but the black tern is found at inland marshes during the breeding season. In breeding plumage, this bird is relatively easy to identify because it is the only all-

black tern and is about the size of a blue jay. In the fall, juveniles and molting adults have black and white mottled plumages. In all plumages, they have short tails and small bills for a tern. Flashing light underwing linings make the black tern especially conspicuous in flight. They have a very light and buoyant flight, almost like a butterfly flitting low and fast over the water.

**BIOLOGY-NATURAL HISTORY:** Black terns nest across the northern United States and southern Canada, and winter in South America. They are regularly seen migrating through Pennsylvania, appearing in April and May, and

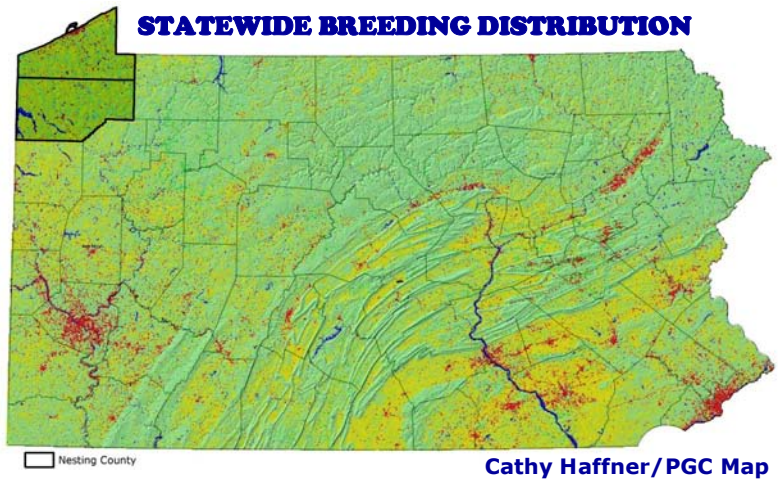
then again in August. Nonbreeding adults can be found here in the summer, but Pennsylvania's north-west corner is the only place in the state where they nest. This area represents the southeast extreme in the species' breeding range. Black terns build fragile cup-shaped nests in reeds or on floating masses of dead plants, just above the water. A typical clutch consists of three olive or buff-brown marked eggs. Young hatch in three weeks, and first fly at three or four weeks of age. Adults aggressively defend their nests by swooping relentlessly at intruders until the intruder retreats. Black terns are primarily insectivorous, snatching up insects in flight. They also eat small fish and crustaceans that they pluck from the water surface.

**PREFERRED HABITAT:** Black terns leave winter coastal areas behind and come inland to nest in prairies and the more extensive deep-water marshes or marsh complexes with extensive cattail beds. Marshes with 50 percent emergent aquatic vegetation, such as cattails, reeds, and rushes, and 50 percent open water are preferred. Winter finds them back along the coast, often with other terns. Black terns often migrate along rivers, but they do not nest on rivers in Pennsylvania.

**REASONS FOR BEING ENDANGERED:** Because black tern nesting colonies in Pennsylvania are small and localized, they are extremely susceptible to both man-caused and natural disasters. In addition, the number of black terns nesting in the state has declined in recent years. The main causes of population declines in North America appear to be habitat loss and degradation on the breeding grounds, although introduced species, human disturbance, and contaminants may be contributing factors. Since the 1950s, the freshwater emergent wetlands upon which the species depends for breeding have declined by 25 percent. Very little is known, however, about threats to the black tern during migration and winter, which account for eight to nine months of the species' annual cycle.



Rob Criswell Photo



**MANAGEMENT PROGRAMS:** Pennsylvania's black terns must be monitored annually. After it is learned where and how many black terns are nesting in the state, measures may be taken to protect and expand their natural habitat. But, as Pennsylvania lies on the margin of this species' breeding range, the birds may not ever be found here in significant numbers. Most nesting sites in Pennsylvania

are owned by the state, so management is possible for this species. Nationally, the recovery of black tern populations likely will require a combination of management efforts and policy initiatives to improve habitat conditions and nesting success. Conservation priorities are: (1.) refining monitoring techniques to better detect population trends and determine the causes of changes; (2.) stemming the tide of wetland loss by forming partnerships to protect and restore wetlands from a landscape perspective; (3.) managing habitat for black terns based on current knowledge while conducting further research to identify limiting factors and evaluate additional management techniques, and (4.) educating the public about the value of wetlands and possible effects of their actions on black terns. Effectively managing wetlands for waterfowl will benefit black terns as well as many other marsh-associated bird species such as the American black duck, American bittern, pied-billed grebe, American coot and marsh wren.

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